Nature paper out of TAU speaks loud truth in Discussion

A very succinct summary of their findings...

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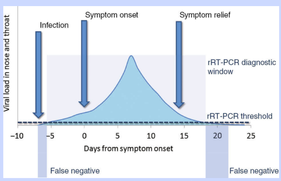
Nov 14

A brand new paper was published in Nature entitled: "Viral load dynamics of SARS-CoV-2 Delta and Omicron variants following multiple vaccine doses and previous infection" on November 7, 2022.[1] The work was done by four individuals working at Tel Aviv University in Israel.

This paper addresses many important issues such as variations in cut-off values used for quantitative polymerase reverse transcription chain reaction (RT-qPCR) assessment of 'COVID-19' status. This technique is used when the starting material is RNA like is the case for SARS-CoV-2. Most of the results in the paper rest on the fact that the authors use the RT-qPCR technique as a proxy for viral load and even infectivity. I would disagree.

In the following image, one can visualize the concept of how viral load and Ct can be associated. Conceptually, it looks ok, but in reality (apart from the bench context), it doesn't work, in my opinion. I still have the memo distributed to the Atlantic Provinces in Canada advising PCR techs to use a Ct of 45. According to that Ct, everyone would need to have no detectable viral load since these parameters are meant to be negatively correlated.

> A prominent factor affecting infectivity is viral load (VL), which negatively correlates with the cycle threshold (Ct) values of quantitative real-time polymerase chain reaction (qRT-PCR).



https://logicalbiological.com/sars-cov-2-the-value-of-ct-values/

To be definitive, RT-qPCR is a DNA amplification technique that does not in any way shape or form, comprise a diagnostic test. It never has, and it never will. It can simply be used as a technique to amplify potentially existing DNA from a sample. If multiple primers are used, appropriate cut-offs are used and the PCR is done in tandem with follow-up sequencing, then an entity can potentially be identified, but again, this will never permit a diagnosis of infectiousness of said entity. The identification of such an entity, such as a virus, only speaks to the presence of viral DNA, not replication competence, for example.

To jump from an RT-qPCR run picking up 'DNA' after being run for what was likely >30 cycles (the highest Ct reported in the results section of the paper was <28), to a 'positive' result with regard to a disease (COVID-19), is beyond ludicrous to me. I do realize that a diagnosis of COVID-19 is often attributed to a combination of this 'method' and the presence of one or more symptoms as determined by a medical professional, but I still don't find it remotely reliable outside of a specific lab context. To convert this most brilliant DNA amplification technique into something called a 'test' that you can do as part of a drive-thru whilst picking up your double spicy chicken crunch burger, that if it comes back 'positive' can end up in you being house arrested, is absolute madness. And who's buying/collecting those 'swabs'? But I digress.

The authors of this Nature paper write that '[SARS-CoV-2] viral load is a prominent factor affecting infectivity, [[and thus]] its laboratory surrogate, qRT-PCR cycle threshold (Ct), can be used to investigate the infectivity-related component of vaccine effectiveness', but I would beg to differ that this could ever be used as a viral load (VL) surrogate in a mass 'testing' scenario and if it was, it would never lend itself to be a basis for such idiocies as lockdowns, restriction of movement of healthy people or coerced injections.

Onto the Discussion section of the paper. I want to be very brief here.

> This study indicates that overall the presumed vaccination-related immunity to SARS-CoV-2 has only a negligible long term (>70-days) effect on Ct value, a common surrogate for VL and infectiousness. The combination of vaccine waning and vaccine evasion are most likely the drivers of this finding. In lieu of several prominent publications describing vaccine effectiveness in prevention morbidity and hospitalization for Omicron, this study mandates reevaluating the role of current vaccination campaigns in harnessing the potential infectivity of COVID-19 at a time scale >2 months. Consequently, different aspects of immunization benefits such as prevention and reduction of transmission (including duration of protection), severe disease, and mortality should be considered in planning booster vaccination campaigns. Decision makers should balance (i) judicious use of vaccine resources (ii) decreasing disease burden especially in high-risk populations (iii) false reassurance and promiscuous behavior due to the short-lived sterilizing immunity, which may deem vaccine campaigns as counterproductive epidemiologic restriction measure without proper communication with the public. Further studies should assess the differential benefits of SARS-CoV-2 vaccines in alleviating disease vs. preventing pathogen spread. Should the lack of sterilizing immunity prove consistent, it may have major ramifications on global pandemic preparedness, vaccination rollout and medical inequity. The demonstrated short-lived immunity and rapid waning on one hand, combined with the limited impact on population on the other, may focus the need for boosters for high-risk groups only, with immediate impact on vaccination campaigns and public health measures upon disease resurgence.

Now once again, I would refute that Ct value can be used as a surrogate for VL and infectiousness of a virus. But our disagreement on this does not reduce the truthfulness of the authors' subsequent statements. And yes, I do see the irony.

They make an extremely important comment on immunization benefits - this is what most people know as 'vaccination' - 'such as prevention and reduction of transmission (including duration of protection), severe disease, and mortality' and yes, I couldn't agree more. These *should* be the aims of the design of a potentially successful vaccine regimen/roll-out. They include 'duration of protection' in brackets but this is perhaps the most important point of all to me. The reason I think this, is because natural immunity - immunity produced in lieu of 'vaccination' in response to foreign pathogen, for example - most oftentimes results in long-lasting (life-long), durable and robust immunity and protection from future re-challenge.

The 'protections' offered by these COVID-19 injectable products are short-lived, at best, and even undermine/by-pass the innate system that involves wickedly fierce mucosal immune mediators to offer incredible protection. It should be absolutely necessary to prove beyond a shadow of a doubt that a vaccine candidate provides durable protection, ***prior to global administration***. These COVID-19 shots do no such thing, and do not stop transmission as has been proven repeatedly.

The authors go on to state correctly that decision-makers need to be judicious with vaccine use by focusing on high-risk populations and to absolutely not lie to the public. Agreed.

They correctly assert that we need to rethink the strategy - and not just rethink it, but deploy techniques that *ACTUALLY* prevent spread of disease. Such techniques as, focusing on protecting people who need protection such as the infirm. They write: "[there should be a refocusing of resources with] immediate impact on vaccination campaigns and public health measures upon disease resurgence."

I would agree. My interpretation of this statement would be this:

The impact on vaccination campaigns: should be to end the vaccination campaign. Completely.

The impact on public health measures: should include improving *actual* public health measures by

1. **making all relevant data/studies transparent**
2. **ending incessant propagation of untrue banalities like the 'safe and effective' mantra**
3. **un-censoring censored material**
4. **ending all mandates and coercion of the public to serve an agenda that has no basis in science**
5. **removing bureaucrats and third-party NGO members from positions of power (especially within parliament) and replacing them with qualified non-conflicted professionals**

Prove me wrong. Thanks for the paper guys. Keep it coming.

1. Woodbridge Y, Amit S, Huppert A, Kopelman NM. Viral load dynamics of SARS-CoV-2 Delta and Omicron variants following multiple vaccine doses and previous infection. Nat Commun. 2022 Nov 7;13(1):6706. doi: 10.1038/s41467-022-33096-0. PMID: 36344489; PMCID: PMC9640564.

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